NCDOT/FMP MEMORANDUM OF AGREEMENT (MOA) Submittal Package to Floodplain Mapping Program (FMP)

All Projects That Fall Within The MOA Criteria Will Need:

(Always check for current MOA guidance and FORMS on the Hydraulics Unit web site)

Electronic Files (see required file directory structure at end of this document):

- FEMA Coordination Form (Excel)
- Title Sheet From Roadway Plans (or Vicinity Map if no Title Sheet. Make sure R/W and Let dates are current) (pdf)
- NCDOT Bridge/Culvert Survey Report (Hydraulics to make a pdf copy of the signed, sealed report)
- **HEC RAS Model Narrative**; describe model changes as progression takes place from the Duplicate Effective Model to the Corrective Effective Model to the Existing (if needed) to the Revised Model. Include documentation of FMP consultation/concurrence (esp. for Type 2c)
- A copy of the Effective Model
- **HEC RAS Model** (follow file naming conventions as stated in the "HEC-RAS File and MOA Project File Nomenclature" which resides under "MOA Documents" on the <u>NCDOT Connect Hydraulics/FEMA Coordination site</u>).
- **HEC RAS comparison table** Excel spreadsheet; see "Sample BFE Comparison Form Spreadsheet.xls". Spreadsheet should cover area from down stream tie to up stream tie. Note: The maximum WSEL increase or decrease should be highlighted.
- Model Cross Section Locations & Project Microstation Files: The data needed is:
 <u>roadway alignment</u>, <u>proposed bridge</u>, <u>slope stakes</u>, <u>TOPO</u> (w/any buildings, etc.), <u>contours</u>
 (<u>TIN file</u>), <u>stream alignment</u>, and <u>HEC RAS cross section locations</u> (with sections labeled).
 Name file as follows: "yyyymmdd_TIP_MOA.dgn".
- As-Built Plans (pdf) First Submittal for Types 3a & 3b, or Final Submittal for Types 1, 2a-2f
- As-Built Certification Review Form (pdf) accompanies As-Built Plans submittal

The following MOA types will also need the additional items specified below:

MOA Type 1: NCDOT MOA No-Rise Certification Form

MOA Types 2b, 2e, 2f, 3a, and 3b

- Parcel boundaries and property owners (submit NCDOT roadway plan parcel boundary electronic file (prl.dgn) with deed book & page numbers)
- For **Type 2f** approval documentation on FEMA Coordination Form

MOA Type 2c: Provide FEMA Coordination Form noting FMP concurrence with Type 2c.

Note: For Type 3c (CLOMR Consultation), provide FEMA Coordination Form to FMP as record of the consultation.

Please submit files in the following required directory structure using the naming convention described in <u>HEC-RAS File and MOA Project File Nomenclature</u>

